CLAIMS

1. A telecommunication router (TLK, RTS) connected to a termination link (TL) and comprising a processor (PROC) adapted to handle packets of data received from said link,

characterized in that said telecommunication router further comprises a plurality of queues (P0-P3) adapted to store packets of data prior to be transferred to said processor (PROC), and a packet classifier (CL) adapted to receive packets of data from said termination link, to classify the received packets according to predetermined types, and to forward classified packets towards one queue out of said plurality, said one queue being selected according to the type of the forwarded packet,

in that each of said predetermined types is associated to a predetermined priority,

and in that said processor is adapted to retrieve packets of data from the queues of said plurality according to predetermined priority rules.

2. The telecommunication router according to claim 1, characterized in said processor (PROC) is adapted to retrieve packets of data from a queue associated to a relative high predetermined priority prior to retrieve packets of data from another queue associated to a relatively lower predetermined priority.

3. The telecommunication router according to claim 1, characterized in that said packet classifier (CL) is adapted to estimate said predetermined priority by analyzing the content of a packet and to forward the analyzed packet to the queue corresponding to the estimated priority.

4. The telecommunication router according to claim 1, characterized in that each queue of said plurality of queues (P0-P3) is

controlled by a queue manager adapted to discard packets coming from said packet classifier (CL) when a predetermined threshold filling level (T0-T3) of the queue is reached.

5. The telecommunication router according to claim 4, characterized in that each queue of said plurality of queues (P0-P3) may have a different predetermined threshold filling level (T0-T3).

6. The telecommunication router according to claim 1, characterized in that said processor (PROC) is adapted to retrieve packets of data from said queues according to the load of said processor.

7. The telecommunication router according to claim 1, characterized in that a plurality of termination links (TL) are connected to said packet classifier (CL).

8. The telecommunication router according to claim 1, characterized in that a plurality of processors (PROC) are adapted to retrieve packets of data from said queues.

9. The telecommunication router according to claim 1, characterized in that said packet classifier (CL) is adapted to forward to an output port (OUT) of said telecommunication router (TLK, RTS) packets that are not intended to said processor (PROC).